

Title (en)

RECHARGEABLE TOOL AND BATTERY STATUS MONITORING IN AN AUTOMATED TOOL CONTROL SYSTEM

Title (de)

WIEDERAUFLADBARES WERKZEUG UND BATTERIEZUSTANDSÜBERWACHUNG IN EINEM AUTOMATISIERTEN WERKZEUGSTEUERUNGSSYSTEM

Title (fr)

OUTIL RECHARGEABLE ET SURVEILLANCE D'ÉTAT DE BATTERIE DANS UN SYSTÈME AUTOMATISÉ DE COMMANDE D'OUTILS

Publication

**EP 3494533 A1 20190612 (EN)**

Application

**EP 17794117 A 20171002**

Priority

- US 201662403549 P 20161003
- US 2017054721 W 20171002

Abstract (en)

[origin: US2018095138A1] An automated tool control system provides both inventory control of items stored in the system and monitoring of the charging status of rechargeable inventory items such as tools and batteries stored in the system. For these purposes, the tool control system includes storage locations for storing tools and other inventory items, and the storage locations include at least one storage location located in a charger operative to charge a rechargeable tool, battery, or battery pack disposed therein. In operation, the tool control system may monitor the charging status of any tool, battery, or battery pack disposed in the storage location of the charger through monitoring of battery status indicators of the tool, battery, battery pack, or charger; through monitoring of current or voltage drawn by the tool, battery, battery pack, or charger; or through wired or wireless communication with a communication enabled tool, battery, battery pack, or charger.

IPC 8 full level

**G06Q 10/08** (2012.01); **G06K 9/78** (2006.01); **H01M 10/42** (2006.01)

CPC (source: EP US)

**A61N 1/3931** (2013.01 - US); **B25H 3/00** (2013.01 - EP US); **G01R 31/3646** (2018.12 - US); **G01R 31/3842** (2018.12 - US); **G06Q 10/087** (2013.01 - EP US); **H01M 10/48** (2013.01 - EP US); **H02J 7/00036** (2020.01 - US); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

See references of WO 2018067439A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 10379167 B2 20190813**; **US 2018095138 A1 20180405**; AU 2017339432 A1 20190131; CN 109791650 A 20190521; EP 3494533 A1 20190612; JP 2020500396 A 20200109; WO 2018067439 A1 20180412

DOCDB simple family (application)

**US 201715722494 A 20171002**; AU 2017339432 A 20171002; CN 201780061190 A 20171002; EP 17794117 A 20171002; JP 2019516510 A 20171002; US 2017054721 W 20171002